Six New Southern African Butterflies

By C. G. C. Dickson, M.Sc.*

(Nos. 36-41)

LYCAENIDAE

(*Concluded from page 280*)

Male (Upperside)

Forewing. Silvery-blue so extensive as to reach or cover partially the black spotting and orange-red spaces in the subapical portion of the wing, and is also fully in contact with at least the lower two-fifths of black distal border. Due to expansion of the black marking in the apical and subapical area this marking tends to coalesce and to reduce greatly the orange-red colouring, in most specimens; and in extreme cases the expansion is such that the area concerned is solidly black.

Hindwing. The solid blue reaches at least most of the black discal spots, with its outer margin fairly evenly curved. Black marginal edging either virtually continuous or with some breaks between certain of the veins. Cilia variegated as regards the light spaces, in some specimens, in which there is admixture of the white, with orange colouring.

Underside

Forewing. The characteristic spotting of the *thysbe* group, well defined. The streak parallel with the distal margin mainly black in most specimens.

Hindwing. As referred to earlier in general diagnosis of the taxon.

Length of forewing: 12.5-16.25 mm. (13.5 mm., in holotype). These measurements represent the normal range of variation in size—odd specimens being a little smaller and others rather larger than has been indicated.

Female (Upperside)

Not differing greatly from that of the female of *P. thysbe* f. *thysbe*, and blue from bases of about the same extent. Black spotting within the orange field well developed.

Plate X

Male genitalia of *Lepidochrysops titei* spec. nov. (Porselein Berg, C.P.).
Fig. 1. Basic portion of structure, with valves and aedeagus removed.
Fig. 2. Valves and juxta (fully compressed).
Fig. 3. Aedeagus (mounted free of any pressure).
Male genitalia of *Thestor pringlei* spec. nov. (nr. Sutherland, C.P.).
Fig. 4. Basic portion of structure. Uncus actually forked for much of its length, but this only apparent near tip, in lateral view.
Fig. 5. Valves (slightly compressed). The small gap dorsally, in each case, due to slight tearing during dissection.
Fig. 6. Aedeagus (mounted free of any pressure). The slight "tooth" towards rounded basal extremity only due to extraneous material adhering to this portion of aedeagus, in the preparation.
Fig. 7. Labides (fully compressed). Basal lobes decidedly more rounded at lower, outer "corners", in some specimens
Fig. 8. Juxta (spread out and fully compressed). Some specimens devoid of the small "tooth" at point of angulation of the margins concerned.

All figures of genitalia 22 times natural size.

* "Blancathra", Cambridge Avenue, St. Michael's Estate, Cape Town.

Forewing. Distinctive features are the complete lack of orange marking on the wing surface next to the cilia and absence of orange in the light (white) divisions of the cilia itself.

Hindwing. Characterised by the sharply defined continuously black marginal edging, amounting in some specimens to a narrow border. Light divisions of cilia almost entirely white.

Underside

Forewing. Marked as in male.

Hindwing. As a whole lighter than in male, with less contrast between the silvery liturae and their background. The darker brownish marking more broken up into separate spots or blotches.

Length of forewing: 13.5-17.75 mm. (15.5 mm., in allotype).

♂ Holotype, WESTERN CAPE PROVINCE (Little Namaqualand): Hondeklip Bay, 7.xii.1974 (Ivan Bampton); British Musuem Reg. No. Rh.18658.

♀ Allotype, W. CAPE PROVINCE (Little Namaqualand): data as for holotype; British Museum Reg. No. Rh.18659.

Paratypes provisionally in author's coll: data as for holotype, 7.xii.1974, five ♂♂, two ♀♀; 19.xii.1974, three ♂♂, one ♀ (I.B.).

Paratypes in Coll. Transvaal Museum: as holotype, 13.xii.1974, one ♂, one ♀ (I.B.).

Paratypes provisionally in Henning Coll.: as holotype, 6.xii.1974, one ♂, two ♀♀; 7.xii.1974, nine ♂♂, three ♀♀; 13.xii.1974, 31 ♂♂, 13 ♀♀; 14.xii.1974, nine ♂♂, six ♀♀; 15.xii.1974, four ♂♂, four ♀♀; 19.xii.1974, one ♂, one ♀. (All specimens collected by Ivan Bampton.) Mr. W. H. Henning intends presenting a pair of these paratypes to the British Museum (Nat. Hist.) and to the Allyn Museum of Entomology, Sarasota, Florida, U.S.A.

Paratypes in Coll. Dr. J. Kaplan: as holotype, 24.ix.1975, three ♂♂, five ♀♀. (Collected by Dr. Kaplan.)

It must be stated that although the locality concerned is given as Hondeklip Bay, the foregoing specimens were taken at several points extending from the coast itself, up to some 11-12 miles approximately east of it.

In some respects this insect approaches, in the male especially, and on the upperside, *Poecilmitis psyche* Pennington, but can be readily distinguished by some of the characters mentioned above, while the normally well marked underside differs greatly from that of *psyche*. It must be stated that there is an occasional form of *P. bamptoni* in which the liturae of the hindwing underside are dulled and the wing-surface in general is of more uniform brownish coloration—but even in this case certain distinctive characters are still present.

In the vicinity of Lambert's Bay (140 miles S.S.E. of Hondeklip Bay) the more usual member of the *P. thysbe* group that is found there is represented by two forms, one of them

approaching the normal form of *P. bamptoni* (but not, from the writer's experience to date, agreeing exactly with it if both surfaces are taken into account); and the other differing in the absence of white spaces in the cilia, on the upperside (but still without any trace of any orange lunules on the adjoining wing-surface), and with a plainly coloured underside as regards the apical and marginal areas of the forewing and the main surface of the hindwing. A similarity to *P. psyche* is apparent in the second form, in particular. The two main forms are not infrequently linked by transitional forms but all specimens retain recognisable features which are common to the entire population. *P. atlantica* Dickson, which is of less frequent occurrence in the Lambert's Bay area, is an entirely distinct species. As far as the more usual member of the group (with its two forms) is concerned, it is felt that this is not specifically distinct from *P. bamptoni* and can reasonably be regarded as constituting no more than a race of this insect. Occasional males also have the subapical area of the forewing upperside almost, or even entirely, black. In endeavouring to assess the relative status of such taxa, one is well aware of the frequent absence of sharp, clear-cut divisions in Nature itself.

Because of their great similarity in allied species of the *P. thysbe* group, the male genitalia have not, in *P. bamptoni* itself, been considered when discussing this taxon.

The late K. M. Pennington found two males of *P. bamptoni* at or in the vicinity of Hondeklip Bay in September, 1964, and was impressed by their unusual features when discussing them with the present writer, but was uncertain about their status owing to the material not being sufficiently representative at that time. Specimens were, however, collected there much earlier by the late Dr. G. van Son—but before much attention had been paid to the *P. thysbe* group. They were noticed recently by Mr. Henning in the collection of the Transvaal Museum, amongst various other members of this group. The butterfly has finally been named after Mr. Ivan Bampton, who was the first one to find it in such numbers as to enable it to be studied adequately.

It may be mentioned that the Lambert's Bay butterfly, referred to earlier, was once seen laying eggs on the small shrub *Lebeckia plukenetiana* E. Mey. (Leguminosae), and at the base of which a larva was found, accompanied by *Crematogaster* ants. However, Mr. Bampton actually secured two or three eggs of *P. bamptoni* at Hondeklip Bay, after they had been laid on a species of *Zygophyllum* (Zygophyllaceae); and from one of them the early stages were reared by the writer to the imaginal stage. A pair of specimens of the former insect (ones with well marked undersides) were subsequently presented to the British Museum (Nat. Hist.).

Thestor **pringlei** spec. nov.

This striking new *Thestor* has features in common with *Th. compassbergae* Quickelberge and McMaster and *Th. kaplani* Dickson and Stephen, but differs decisively from both these species in certain respects. In marking, it is closer to the

former, and the male genitalia also suggest a greater affinity to this insect. The development of the dark marking of the upperside of the male, at least, is more as in *compassbergae* as against the remarkably full development in the male of *kaplani*. In both sexes of this Lycaenid the orange-ochreous ground-colour of the upperside is of a noticeably richer tone than in the other two species (but this may not be consistently so in all female specimens).

Forewings of the male a little less elongated than in *compassbergae* but rather more so than in *kaplani*. The average size is approximately that of the former and perhaps a little below that of *kaplani*.

Male (Upperside)

Forewing. Dark blackish-brown outer portion of wing decidedly extensive and rather more so than in *compassbergae*, with a streak of ochreous colouring (represented by spotting between the veins) bordering inwardly the very broad, dark distal border, not always well defined and in extreme cases only just apparent.

Hindwing. Differing little from that of *compassbergae* apart from the richer tone of the ochreous colouring.

Cilia of all wings with greyish-brown and whitish chequering, which is more often not sharply defined, especially in hindwing, and in which a light tint may predominate at the upper angle and a darker tone elsewhere—although there is variation in different specimens and some have the cilia more lightly coloured throughout.

Underside

Forewing. Resembling that of *compassbergae* in colouring and marking. Costal area tends to be less whitish—scaled and the dark sagittate markings parallel with the distal margin not as prominent subapically; but there are inconsistencies in this respect.

Hindwing. Wing without the definite white or partially white surface which is often present in *compassbergae*. Discal marking, at least, reduced in comparison with that of *compassbergae* (in which this marking as well as that nearer the base is frequently very prominent), and consisting principally of the very irregular streak from near costal margin almost to inner margin, which is more clearly linear throughout its length than in normally marked examples of *compassbergae*, and the inner portion of which (up to vein 4) is inclined to be more outwardly placed.

Length of forewing: 15.5-18.0 mm. (17.5 mm., in holotype).

Female

As is not unusual in females of closely related Lycaenids, less difference is apparent between the female of *Th. pringlei* and the females of *compassbergae* and *kaplani* than between the corresponding males. From the specimens available for comparison, the female of the present species is, as in the case of the male, closer in general to that of *compassbergae* than to that of *kaplani*.

Upperside

The allotype, with the rich orange-ochreous colouring of male specimens, and the dark marking much in evidence and basically as in the female of *compassbergae* (though particularly well developed discally in the forewing), but one paratype lighter in ground-colour and the dark marking as a whole greatly reduced—including the spotting in all wings.

Cilia as in male, with due allowance made for the usual individual variation in specimens.

Underside

Not differing much from that of *compassbergae,* but remarks under male concerning the dark marking apply, in part, to female also. Ground-colour of hindwing of a nearly uniform fawn-colour with less suggestion of slight variegation in places than in *compassbergae.* The irregular discal streak is linear in the female of both species, but may not be as sharply defined as is usual in the male of *pringlei.* Outermost portion of streak, in areas 4 and 5, in the form of a w-shaped marking in *pringlei* but not, or hardly so, in females of *compassbergae* that have been examined up to the present.

Length of forewing: 18.5-19.5 mm. (the former measurement, that of allotype).

In both sexes the body and ancillary parts are superficially very much the same as in *Th. compassbergae.*

♂ Holotype, WESTERN CAPE PROVINCE: Sutherland, 13.xii.1974 (E. L. Pringle); British Museum Reg. No. Rh.18660.

♀ Allotype, W. CAPE PROVINCE: data as for holotype; British Museum Reg. No. Rh.18661.

Paratypes in author's coll.: as holotype, 13.xii.1974, five ♂ ♂, two ♀ ♀; 15.xii.1974, one ♂ (E.L.P.).

Paratypes in Coll. V. L. and E. L. Pringle: as holotype, 13.xii.1974, 17 ♂ ♂, six ♀ ♀; 15.xii.1974, two ♀ ♀ (E.L.P.).

Paratypes in Coll. Transvaal Museum: as holotype; one ♂ and one ♀ to be selected from above paratypes.

It is of interest that *Th. pringlei* and the two other species should all fly at about the same time of year, in spite of their widely separated habitats.

The genitalia of two males of *Th. pringlei* were dissected and compared with those of two males (in each case) of *compassbergae* and *kaplani.* Those of *pringlei* are shown in the plate and detailed reference to each part will not be made, except where some difference has been present in the preparations concerned. *Falces* (as in *compassbergae*) wider at or near base than in *kaplani. Labides,* in *pringlei,* differing from those of the other two species in having a broad extension, on one side, from basal portion to point of juncture with the juxta. *Valves* very similar to those of *kaplani* (with slight variation in outline in both species), but relatively broader than those of *compassbergae. Aedeagus* with the basal portion, from the distal end of dorsal opening, sloping down at a greater angle to the main body of the aedeagus than in the other two species. *Saccus* of moderate length, but more flattended, and broader laterally, than in *kaplani,* but far less broad than in *compassbergae.*

This very attractive *Thestor* has been named, appropriately, after its discoverer, Mr. Ernest L. Pringle, who has written about it as follows: — "On the 13th December, 1974, my father and I were climbing the southern slope of a mountain on the Roggeveld Escarpment, about 10 miles South-West of Sutherland, at 9.30 a.m., when I spotted the first specimens of this *Thestor*. On searching the area a strong colony was found along a rocky ridge about three-quarters of the way up the mountain. Here males were found flying within extremely limited areas, situated on bare patches of ground. They were obviously extremely territorial and the colony itself appeared to be fairly restricted. The females were rather scarce relative to the males, and most were found flying at random over a fairly extensive area stretching all the way to the summit of the mountain. Reasonably extensive exploration of the Escarpment showed that this insect was, as we had thought, fairly localised. We were very pleased, therefore, to find further specimens on the 15th December at the head of the Komsberg Pass, even though this colony did not appear to be a strong one."

HESPERIIDAE

Tsitana tulbagha **kaplani** subsp. nov.

Coming originally from Vogel Vlei and Piquetberg, where it was collected by Trimen in 1863 and 1869 respectively, the type-form of *Tsitana tulbagha* (Trimen) is representative of the more extreme westerly portion of the species' range in the Western Cape, with numerous scattered populations in suitable terrain in which the larval food-plant, *Danthonia* sp. (Gramineae), exists. The race which is now being described is, on the other hand, characteristic of the populations occurring further to the east and specimens of which are at once separable by their darker undersides.

Both sexes are without the definitely fawn-coloured tone which is present on the under surface of nominate *Tsitana tulbagha*.

Male (Underside)

Forewing. The lighter coloration of costal, apical and terminal areas less pronounced, with these areas decidedly duller, in fact, than in nominate race.

Hindwing. Ground-colour relatively dark brown, against the general fawn colour in nominate *tulbagha* (in which race this tone is particularly apparent in the entire area above the dark edging of the main white radial streak which extends from the wing-base, through the cell, to the distal margin— though present also, outwardly, well below the streak, before becoming intermixed with whitish scaling (or white hairs)). In *kaplani* the whitish effect is generally more pronounced and extensive in the portion of the wing concerned; and, frequently, a partially developed white streak borders the dark inner-marginal fold. The streak is not, or hardly, apparent in some specimens owing to the contiguous whitish portion of the wing effacing its form. The corresponding streak is consistently

present in nominate *tulbagha*, even if it is not always strongly defined.

Length of forewing: 15.5-19.0 mm. (18.0 mm., in holotype).

Female (Underside)

Characteristic features, in all wings, as noted for the male. The females of both races tend to be lighter in general than the corresponding males, but with a less noticeable whitish area in the hindwing.

Length of forewing: 16.5-19.5 mm. (17.5 mm., in allotype).

♂ Holotype, WESTERN CAPE PROVINCE: Seven Weeks Poort, 7.xii.1973 (Dr. J. Kaplan); British Museum Reg. No. Rh.18662.

♀ Allotype, W. CAPE PROVINCE: data as for holotype; British Museum Reg. No. Rh.18663.

Paratypes in author's coll.: Keerom Berg, nr. Worcester, C.P., 20.x.1956, one ♂, one ♀; 22.xi.1956, one ♂, two ♀♀ (C.G.C.D.). Karbonaatjes Kraal, beyond top of Hex River Pass, 5.xii.1949, five ♂♂ (A. J. Duke). Roodeberg, Robertson Karroo, 24.xi.1966, one ♂ (C.G.C.D.). Tafel Kop, W. of Montagu, 9.xi.1962, two ♂♂ (C.G.C.D.). Nr. Montagu Baths, 5.xi.1962, one ♀ (C.G.C.D.).

Paratypes in Coll. J. Kaplan: as holotype, 11♂♂, five ♀♀ (J.K.).

Paratypes in Coll. C. W. Wykeham: Karroo Poort, C.P., 18.xi.1967, three ♂♂, three ♀♀ (C.W.W.). Wagenbooms Bergen, 14.xi.1962, one ♀ (C.W.W.). Koelefontein Hills, Robertson Karroo, 21.x.1962, four ♂♂, two ♀♀ (C.W.W.). Montagu, 9.xi.1962, five ♂♂, one ♀ (C.W.W.).

Paratypes in Coll. Transvaal Museum: as holotype, 30.x.1941, one ♂, two ♀♀; 21.x.1954, one ♂ (Dr. G. van Son); 26.x.1946, one ♀; 7.xi.1946, one ♂, one ♀; 1.xii.1957, one ♂ (K. M. Pennington).

Although the present race does vary much in size, and some specimens are comparatively small, the average size is generally above that of nominate *tulbagha*. This does not apply, however, to examples from the Robertson Karoo—in spite of their appearing to fall under *kaplani*. The males are probably also darker, on the whole, even on the upperside; but a certain amount of fading takes place in time, in cabinet specimens. The original very deep brown colour of the upperside, in the male anyway, is not apparent in the accompanying plate.

The male genitalia of *kaplani* have been compared with the genitalia of the nominate race without any very essential differences being noticed. The former have been larger, but proportionate to the greater size of the insects themselves. Some individual variation occurs in the distal end of the valve, which is more acute in some specimens than in others. The more clearly excised portion of the aedeagus towards basal end, is decidedly longer in *kaplani* than in the nominate race. A

diagrammatic representation of the male genitalia of nominate *Ts. tulbagha* is given in Brigadier Evans' *Catalogue of the African Hesperiidae,* Pl. 16 (1937); and the genitalia have been figured by the Rev. D. P. Murray, in *Durban Museum Novitates,* **5** (17), Pl. 1 (1959). The valves are of a more elongated form than is indicated in either of these illustrations.

Both races of *Ts. tulbagha* frequent rough hill- or mountain-sides, or fly at the base of hills if the necessary coarse tussock grass is present. Their rather rambling flight is far from rapid, and unlike that of the majority of Skippers, although they have a fairly quick, characteristic, wing-beat.

Thanks are extended to Miss J. K. Erasmus for the care taken in finally typing this manuscript.

A NEW NAME FOR EXOMELLA FENNAH, 1957 (HOMOPTERA, FULGOROIDEA, FLATIDAE). — Through the kindness of Professor J. T. Medler, it has been brought to my attention that the generic name *Exomella* Fennah, 1957, *Annls. Mus. r. Congo Belge,* Ser. 8°, Sci. Zool. **59**: 172, is preoccupied by *Exomella* Casey, 1914, *Mem. Col.* **5**: 378. There is no junior synonym available as a replacement. Accordingly, for *Exomella* Fennah I now propose the new name *Afrexoma.* This is considered to be of feminine gender. — R. G. FENNAH, c/o Commonwealth Institute of Entomology, British Museum (Natural History), London, S.W.7.

PARASCOTIA FULIGINARIA L. (WAVED BLACK) IN EAST SUSSEX. — I took a male *P. fuliginaria* in my light trap on the night of 26th July. This was the first time I had come across this moth since moving from Worcestershire in 1974 where, since 1973, I had taken seven examples of the insect including one at sugar. Attempts at rearing the species from ova in 1973 and 1974, however, failed since I could not get the larvae to survive beyond March, even when kept out of doors. — A. E. C. ADAMS, Dabchick Cottage, Dallington, Heathfield, Sussex.

ARICIA ANTEROS FREYER ON MT. TAYGETOS. — In mid June, 1975 I took a single fresh specimen of *Aricia anteros* Freyer at about 1,000m. on the Taygetos of southern Greece. This record seems to represent the most southern Grecian locality for this insect, which had previously been known to occur only as far South as Mt. Chelmos. The interest of this record lies in the fact that, although Mt. Taygetos lies only 60 miles from Mt. Chelmos, several species of butterfly are thought to occur on one member of this pair of mountains and not on the other, despite the absence of any obvious barrier to colonisation between these two mountains. Species which show this peculiar distribution include *Philotes bavius* Eversmann, *Colias aurorina* Herrich-Schaeffer, *Polyommatus menelaos* Brown, and used to include *A. anteros.* — J. BROWN, 12 Browning Avenue, Sutton, Surrey.